

Appendix 2: Description of MIDs according to subgroups and the results of subgroup analysis

Table S1: Summary of all MIDs for improvement for interested PROs or instruments

Instrument/domain (score range)	Number of estimates	Median estimate	Minimum estimate	Maximum estimate	Mean	Standard deviation	95% CI
Absolute MIDs							
Constant score (0-100)	19	12.80	0.3	36	14.06	9.22	9.62 to 18.51
Simple shoulder text (SST) (0-100)	8	1.93	1.4	2.9	1.99	0.53	1.54 to 2.42
Pain VAS (overall) (0-10)	7	1.40	0.5	2.70	1.58	0.68	0.95 to 2.21
Pain VAS (Activity) (transfer to 0-10)	1	2.1					
Pain VAS (at rest) (transfer to 0-10)	1	3.04					
Disabilities of the Arm, Shoulder and Hand (DASH) (0-100)	7	10.20	4.4	25.41	11.56	6.73	5.34 to 17.78
Oxford shoulder score (OSS) (0-48)	8	5.3	4	14.7	6.51	10.7	3.59 to 9.43
PNRS (0-10)	5	3.43	1.1	6.25	3.50	2.01	1.00 to 6.00
Quick DASH	1	13.4					
Neer score	3	1.99	1.51	3.73	2.41	1.17	-0.49 to 5.31
EQ-5D-3L	2; 2	Raw: 0.07; VAS: 7.18	0.02; 6.86	0.11; 7.50	0.07; 7.18	0.06; 0.45	-0.51 to 0.64; 3.11 to 11.25
SF-12 (0-100)	3; 3	Physical: 2.04 Mental: 0.96	1.0; 0.86	2.44; 4.00	1.83; 1.94	0.74; 1.78	-0.02 to 3.67; -2.49 to 6.37
Relative MIDs							
Constant score (0-100)	2	18.6%	15.2%	22%	18.6%	4.8%	-24.60 to 61.8
Oxford shoulder score (OSS) (0-48)	1	11.10%					
Quick DASH	1	8%					

Table S2: Summary of MIDs for improvement for interested PROs or instruments according to intervention administered during the study to measure the PRO or instrument

Instrument/domain (score range)	Number of estimates	Median estimate	Minimum estimate	Maximum estimate	Mean	Standard deviation	95% CI
Surgical intervention							
Absolute MIDs							
Constant score (0-100)	7	10.40	0.3	16.6	9.31	6.47	3.34 to 15.29
Simple shoulder text (STT) (0-100)	6	1.65	1.4	2.9	1.92	0.61	1.28 to 2.55
Pain VAS (overall) (0-10)	6	1.5	0.5	2.7	1.62	0.74	0.84 to 2.40
Pain VAS (Activity) (transfer to 0-10)	1	2.1					
Pain VAS (at rest) (transfer to 0-10)	1	3.04					
Disabilities of the Arm, Shoulder and Hand (DASH) (0-100)	1	10.1					
Quick DASH	1	13.4					
Oxford shoulder score (OSS) (0-48)	1	6.9					
Non-surgical intervention							
Absolute MIDs							
Constant score (0-100)	10	16	5.1	30	15.99	7.74	10.45 to 21.53
Simple shoulder text (STT) (0-100)	2	2.19	2.05	2.33	2.19	0.20	0.41 to 3.97
Pain VAS (overall) (0-10)	1	1.37	One estimation				
Disabilities of the Arm, Shoulder and Hand (DASH) (0-100)	3	10.2	4.4	25.41	13.34	10.85	-13.62 to 40.29
Oxford shoulder score (OSS) (0-48)	7	5	4	14.7	6.46	3.77	2.97 to 9.94
PNRS (0-10)	5	3.43	1.1	6.25	3.50	2.01	1 to 6
Neer score	3	1.99	1.51	3.73	2.41	1.17	-0.49 to 5.31
EQ-5D-3L	2; 2;	Raw: 0.07; VAS: 7.18	0.02; 6.86	0.11; 7.50	0.07; 7.18	0.06; 0.45	-0.51 to 0.64; 3.11 to 11.25
SF-12	2; 2	Physical: 2.24; Mental: 0.91	2.04; 0.86	2.44; 0.96	2.24; 0.91	0.28; 0.07	-0.30 to 4.78; 0.27 to 1.55
Relative MIDs							
Constant score (0-100)	2	18.6%	15.2%	22.0%	18.6%	4.81	-24.6 to 61.8
Oxford shoulder	1	11.1%					

score (OSS) (0-48)							
Quick DASH	1	8%					
Surgical or non-surgical intervention							
Absolute MIDs							
Constant score (0-100)	2	21.05	6.1	36.0	21.05	21.14	-169 to 211
Disabilities of the Arm, Shoulder and Hand (DASH) (0-100)	2	9.55	6.7	12.4	9.55	4.03	-26.66 to 45.76
Quick DASH	1	13.4					
SF-12	1 1	Physical:1 Mental: 4					
Not report the intervention							
Absolute MIDs							
Disabilities of the Arm, Shoulder and Hand (DASH) (0-100)	1	11.7					

Table S3: Summary of MIDs for improvement for interested PROs or instruments using transit anchor according to follow-up period

Instrument/domain (score range)	Number of estimates	Median estimate	Minimum estimate	Maximum estimate	Mean	Standard deviation	95% CI
Less than 3 months							
Absolute MIDs							
Constant score (0-100)	1	11.60					
Disabilities of the Arm, Shoulder and Hand (DASH) (0-100)	1	25.1					
Oxford shoulder score (OSS) (0-48)	4	4.45	4	7	4.98	1.37	2.79 to 7.16
PNRS (0-10)	4	3.99	1.10	6.25	3.83	2.16	0.40 to 7.26
Neer score	3	1.99	1.51	3.73	2.41	1.17	-0.49 to 5.31
Relative MIDs							
Quick DASH	1	8%					
3 months or more							
Absolute MIDs							
Constant score (0-100)	18	13.9	0.3	36	14.20	9.47	9.49 to 18.91
Simple shoulder text (STT) (0-100)	8	1.93	1.4	2.9	1.99	0.53	1.54 to 2.43
Pain VAS (overall) (0-10)	7	1.4	0.5	2.7	1.58	0.68	0.95 to 2.21
Pain VAS (Activity) (transfer to 0-10)	1	2.10					
Pain VAS (at rest) (transfer to 0-10)	1	3.04					
Disabilities of the Arm, Shoulder and Hand (DASH) (0-100)	6	10.15	4.4	12.4	9.25	3.09	6.01 to 12.49
Oxford shoulder score (OSS) (0-48)	4	6.25	5	14.7	8.05	4.50	0.88 to 15.22
PNRS (0-10)	1	2.17					
Quick DASH	1	13.4					
EQ-5D-3L	2; 2	Raw: 0.07; VAS: 7.18	0.02; 6.86	0.11; 7.50	0.07; 7.18	0.06; 0.45;	-0.51 to 0.64; 3.11 to 11.25
SF-12 (0-100)	3 3	Physical: 2.04 Mental: 0.96	1.00; 0.86	2.44; 4.00	1.83; 1.94	0.74; 1.78	-0.02 to 3.67; -2.49 to 6.37
Relative MIDs							
Constant score (0-100)	2	18.6%	15.2%	22.0%	18.6%	4.81%	-24.6% to 61.8%
Oxford shoulder score (OSS) (0-48)	1	11.1%					

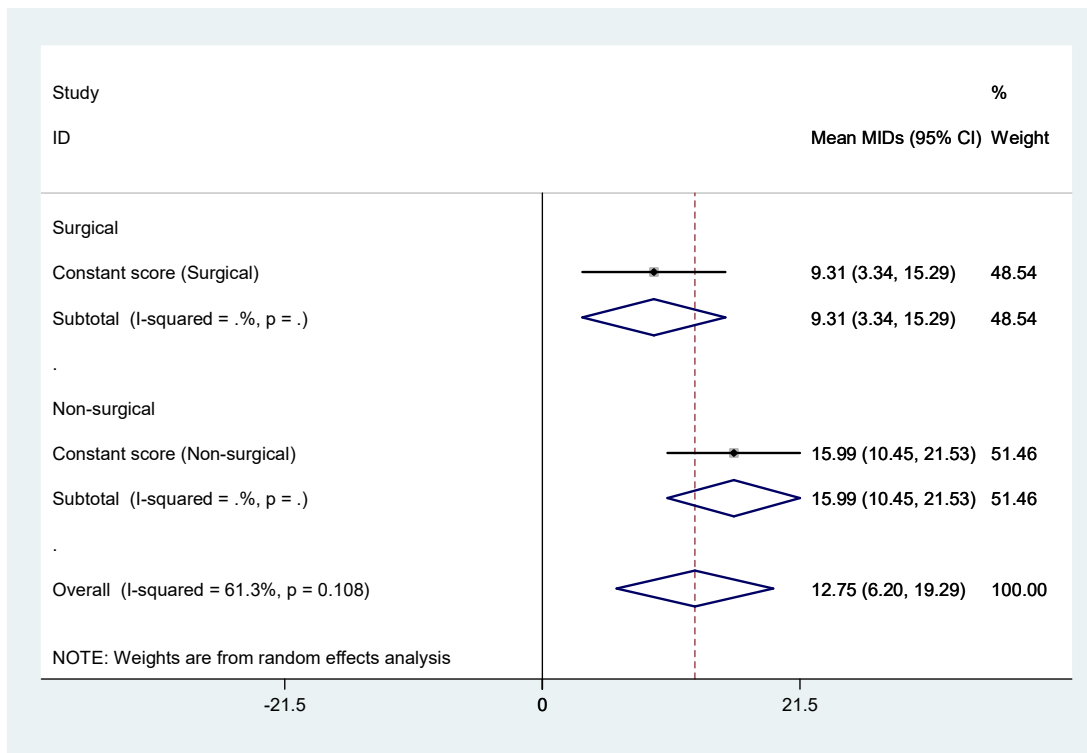


Figure S1: Subgroup analysis for Constant score by intervention type. MID, minimally important difference

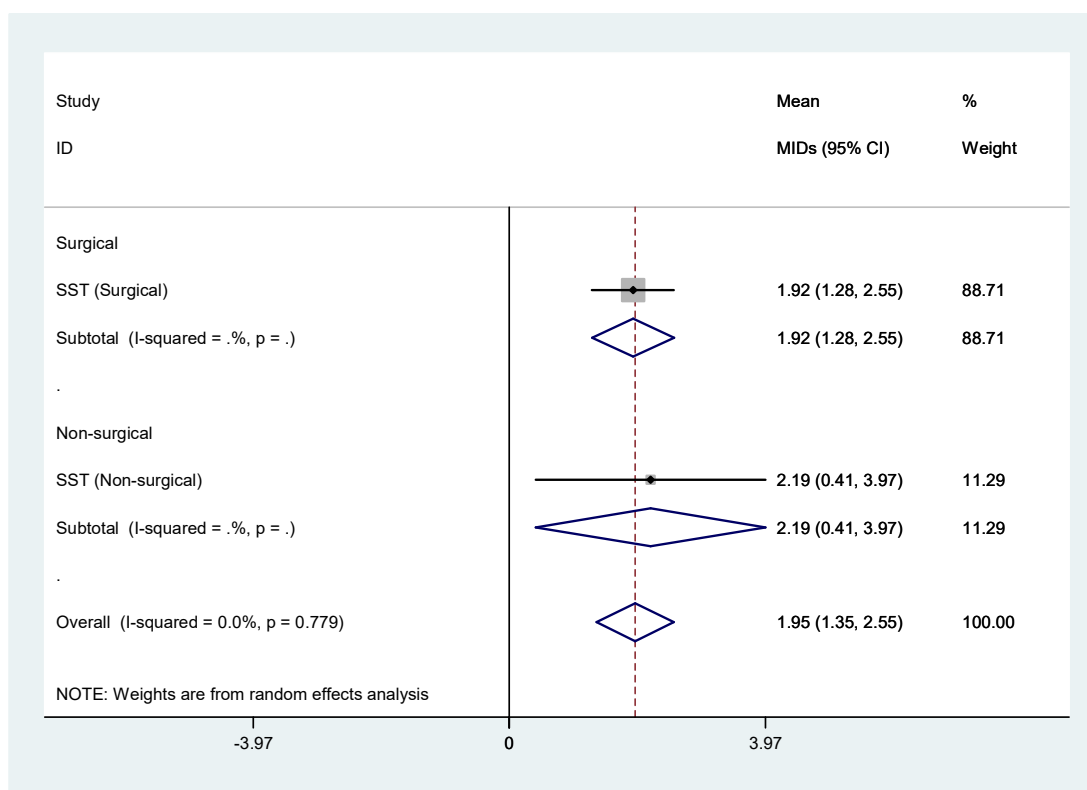


Figure S2: Subgroup analysis for SST by intervention type. MID, minimally important difference; SST: Simple Shoulder Test

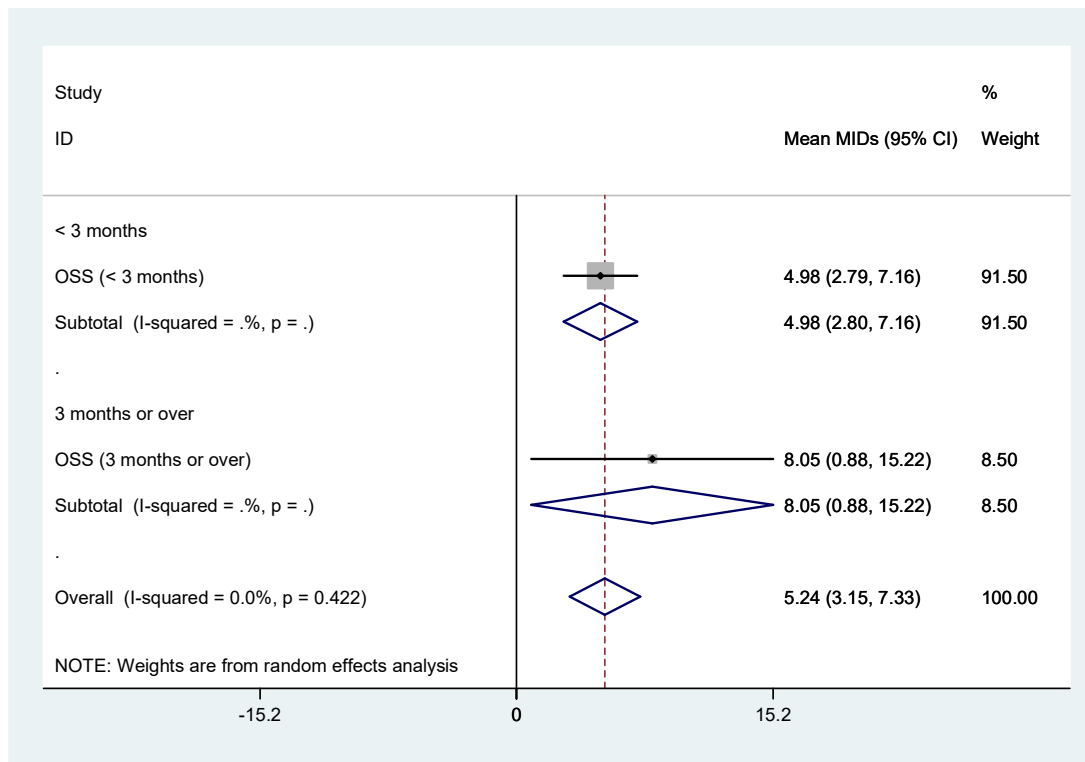


Figure S3: Subgroup analysis for OSS by follow-up time. MID, minimally important difference; OSS: Oxford Shoulder Score